

IUBMB Enzyme Nomenclature

EC 2.7.4.6

Common name: nucleoside-diphosphate kinase

Reaction: ATP + nucleoside diphosphate = ADP + nucleoside triphosphate

Other names: nucleoside 5'-diphosphate kinase; nucleoside diphosphate (UDP) kinase; nucleoside diphosphokinase; nucleotide phosphate kinase; UDP kinase; uridine diphosphate kinase

Systematic name: ATP:nucleoside-diphosphate phosphotransferase

Comments: Many nucleoside diphosphates can act as acceptors, while many ribo- and deoxyribonucleoside triphosphates can act as donors.

Links to other databases: [BRENDA](#), [EXPASY](#), [GTD](#), [KEGG](#), [WIT](#), CAS registry number: 9026-51-1

References:

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3. Kirkland, R.J.A. and Turner, J.F. Nucleoside diphosphokinase of pea seeds. *Biochem. J.* 72 (1959) 716-720.
4. Krebs, H.A. and Hems, R. Some reactions of adenosine and inosine phosphates in animal tissues. *Biochim. Biophys. Acta* 12 (1953) 172-180.
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6. Ratliff, R.L., Weaver, R.H., Lardy, H.A. and Kuby, S.A. Nucleoside triphosphate-nucleoside diphosphate transphosphorylase (nucleoside diphosphokinase). I. Isolation of the crystalline enzyme from brewers' yeast. *J. Biol. Chem.* 239 (1964) 301-309.

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